

Specification Amendments:

Please amend the title as follows:

Reversible Fiber Optic Stub Fiber Connector

Please amend the paragraph beginning at Page 8, Line 1 as follows:

As seen in Figs. 4 and 5, the SC assembly has an inner housing 22 containing a hollow ferrule holder 24 and a cam ~~sleeve~~ 26. The ferrule holder has a ferrule-receiving portion 28 for surrounding one end of a ferrule 30, a flange portion 32, a large barrel portion 34 having a rib slot 36, a medium barrel portion 38 having a clamp slot 40 for receiving a buffer clamp 41, and a small barrel portion 42 having an opening 44 at its end. The cam 26 includes a large barrel portion 46 having a lever 48 extending outwardly therefrom, and a small barrel portion 50. There is a large interior cam surface 52 within the large barrel portion 46 of the cam ~~sleeve~~ 26 and a small interior cam surface 53 within the small barrel portion 50 of the cam ~~sleeve~~ 26, the cam surfaces having variable radii from the center of the cam (the axis of the coaxial barrel portions of the cam). Although as seen in Fig. 6, the larger and smaller radii of the respective cam surfaces 52 and 53 are generally in angular alignment, it is not required that they be so aligned, and depending on the locations and orientations of other connector components, there may be no such alignment.

Please amend the paragraph beginning at Page 10, Line 4 as follows:

The cam sleeve 26 is slid over the three barrel portions 34, 38, and 42 of the ferrule holder 24 until it comes flush with the flange portion 32 thereof.

Given that the rib 55 of the upper crimp plank 54 protrudes through the rib slot 36 of the large barrel portion 34 and that the transverse portion 66 and its cam following surface 68 of the buffer clamp 41 protrude from the clamp slot 40 of the medium barrel portion 38, the cam sleeve 26 will have to be appropriately angularly oriented when it is being slid over the ferrule holder 24 so that the larger radii of the respective interior cam surfaces, 52 and 53, will fit over these protruding elements and not interfere with them such that the cam sleeve cannot be applied over the ferrule holder.

Please amend the paragraph beginning at Page 11, Line 20 and continuing to Page 12 as follows:

Once the operator determines that the fiber ends have made contact, he manually rotates the lever 48 of the cam sleeve 26 that protrudes from an open portion of the inner housing 22. Rotation of the cam causes the large interior first cam surface 52 to tighten over the rib 55 that is protruding through rib slot 36 in the large barrel portion 34 from clamp plank 54. This causes the planks 54 and 56 to be squeezed together along their abutting surfaces and the groove 57 therealong, thereby compressing the stub fiber end and field fiber end to hold them in place along the length of the groove 57 and better align them to each other within the groove at their interface. At the same time, the small interior second cam surface 53 tightens over the cam-following surface 68 of the buffer clamp 41, thereby causing the grasping portion 70 thereof to compress against the buffer

20, providing strain relief for the field fiber and inhibiting any pulling of the stub and field fiber ends away from one another within the groove. Additionally, the teeth 71 of the buffer clamp inhibit rotational movement of the buffer layer and the fiber inside.

The cam 26 and the buffer clamp 41 comprise a reversible actuator 43, as shown in Fig. 16.

Please amend the paragraph beginning at Page 12, Line 12 and continuing to Page 13 as follows:

Testing may be performed during the connection method by way of a local testing device, such as a visible fault locator (VFL). Because no irreversible and/or destructive crimping, connecting or strain relief measures are performed, if the testing indicates the fiber optic connection, or even the mechanical connection, to be inadequate, the entire connective method is fully nondestructively reversible by manually rotating the lever 48 of the cam sleeve 26 back into its original position. This simultaneously releases pressure on the rib 55 (and thereby the planks 54 and 56) and releases the compression of the buffer clamp 41 on the buffer. Thus, the field fiber may simply be rotated or otherwise agitated prior to reclamping the connector and once again determining whether a successful connection has been completed. Alternatively, the field fiber may be withdrawn from the connector at that point, optionally recleaved, and subsequently reinserted for another attempt at a successful connection. As with regard to other uses of the term "simultaneous" herein, actual chronological coincidence is not required within the context of the invention, the term more generally referring to actions occurring around the same time and/or caused by the same triggering event.

Please amend the paragraph beginning at Page 13, Line 6 as follows:

The front end 82 of the inner housing 22 is then inserted into the mouth of the outer housing 12, until the inner housing is completely swallowed by the outer housing and complementary structure on the outside of the inner housing and inside of the outer housing engages such that the inner housing is retained within the outer housing. The lever 48 of the cam 26 may preferably need to be rotated to a particular angular orientation to facilitate insertion of the ferrule holder 24 and cam sleeve 26 into the inner housing 22 (to form the SC assembly 13), and then subsequently to further facilitate the insertion of the SC assembly 13 into the outer housing 12. The inner housing 22 preferably limits rotation of the lever 48 where the cam is fully actuated. Once the SC assembly 13 is inserted into the outer housing 12, then, the lever 48 will preferably be angularly fixed between the ferrule holder and outer housing.

Please amend the paragraph beginning at Page 13, Line 17 as follows:

In summary then, the operator needs only to appropriately strip the field fiber, insert it into the assembly, rotate the lever 48 of the cam sleeve 26 to effect connection and strain relief at the buffer, verify the connection with a local testing device, and then insert the assembly into the outer housing 12 and screw the retention nut 86 over the externally threaded portion 80 of the backbone 14.

Please amend the paragraph beginning at Page 14, Line 19 and continuing to Page 15 as follows:

It is contemplated within the scope of the invention that the ~~cam or other~~ reversible actuator that may simultaneously align/terminate the fibers while providing strain relief on the buffer may essentially be two independent actuators, one for aligning/terminating the fibers and one for providing reversible and nondestructive strain relief on the buffer. While such an arrangement might involve an extra step in engaging the connector, depending upon whether the two actuations could both be toggled in a single step, functionality or cost benefits could accrue from having the functions performed independently while preserving the nondestructiveness and full reversibility of the strain relief provided on the buffer. While the reversible actuator shown in the figures is a cam, any type of reversible actuator, e.g., a switch, is considered to be usable within the context of the invention.